R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE CLAIMS

Claim 1 has been amended to clarify the features of the present invention whereby the laser light irradiation optical system comprises: (i) an active optical element on which a variable pattern set to correspond to a necessary area is formed, and (ii) a guide optical system which is positioned between the active optical element and the sample; and whereby the laser light is irradiated through the active optical element on which the pattern is formed, and guided to the sample by the guide optical system so that a portion of the sample corresponding to the necessary area is irradiated with the laser light. See, for example, Figs. 1 and 3-7 and the disclosure in the specification at, for example, page 8, line 24 to page 9, line 1.

Similarly, claim 12 has been amended to clarify the features of the present invention whereby the laser light irradiation optical system comprises: (i) pattern forming means for transmitting or reflecting the laser light selectively in accordance with a variable pattern which is set to correspond to a necessary area, and (ii) optical guiding means, positioned

between the pattern forming means and the sample, for optically guiding the laser light from the pattern forming means to the sample; and whereby the laser light is irradiated to the sample through the variable pattern formed by the pattern forming means, and guided to the sample by optical guiding means so that a portion of the sample corresponding to the necessary area is irradiated with the laser light.

And similarly, claim 23 has been amended to clarify the feature of the method of the present invention whereby the laser light is guided from the active optical element to the sample, via a guide optical system positioned between the active optical element and the sample, so as to irradiate a portion of the sample corresponding to the necessary area with the laser light.

In addition, claims 7 and 18 have been amended to better accord with amended independent claim 1.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

THE PRIOR ART REJECTION

Claims 1-5, 7, 10-16, 18 and 20-26 remain rejected under 35 USC 102 as being anticipated by USP 6,251,516 (previously cited "Bonner et al"), and claims 6, 8, 9 17 and 19 remain

rejected under 35 USC 103 as being obvious in view of the combination of Bonner et al and USP 5,756,586 (previously cited "Caprioli"). These rejections, however, are again respectfully traversed with respect to the claims as amended hereinabove.

On page 2 of the Advisory Action, the Examiner contends that "[f]igures 1 and 5 of the primary reference show variable shapes and regions are selected based on a zone of interest." It is respectfully pointed out, however, that "zones" A, B, C and D in Fig. 1 of Bonner et al are actually portions of the sample that are identified using dyes, labeled molecules, and so on. No structure of the microscope of Bonner et al forms these patterns. Instead, these "zones" A, B, C, and D in Fig. 1 of Bonner et al are merely inherent regions of the sample with respect to particular tagged antibodies. And it is respectfully submitted that the different regions of the sample shown in Fig. 1 of Bonner et al does not at all correspond to an active optical element.

Fig. 5 of Bonner et al, moreover, merely shows that once an area of interest has been removed from a sample on a slide, it may be subjected to analysis. See column 7, line to column 8, line 18 of Bonner et al. Clearly, Fig. 5 of Bonner does not disclose teach or suggest an active optical element corresponding to the active element or pattern forming means of the present

invention as recited in amended independent claims 1 and 12 which forms a variable pattern set to correspond to a necessary area of a sample to be obtained.

In addition, it is respectfully submitted that the Examiner has once again failed to identify any structure in Bonner et al corresponding to a transmission type active optical element (claims 10 and 21) or a reflection type active optical element (claims 11 and 22), and that the Examiner has once again failed to identify any structure in Bonner et al corresponding to a transmission type active optical element that comprises a liquid crystal substrate (claim 34) or a reflection type active optical element that comprises a micro mirror array (claim 35).

According to the present invention as recited in each of amended independent claims 1, 12 and 23, a variable pattern which is set to correspond to a necessary area of a sample is formed on an active optical element or pattern forming means. And according to the present invention as recited in each of amended independent claims 1, 12 and 23, laser light is irradiated through the active optical element or pattern forming means, and is then guided by a guide optical system or optical guiding means to the sample so that a portion of the sample corresponding to the necessary area is irradiated with the laser light. And as recited in each of amended independent claims 1, 12 and 23, the

guide optical system or optical guide means is positioned between the sample and the active optical element or pattern forming means.

Presumable, the Examiner considers the transfer film 54 of Bonner et al to correspond to the active optical element or pattern forming means of the claimed present invention. Indeed, Bonner et al discloses that laser light is irradiated across various parts of the transfer film 54. In Bonner et al, however, irradiating the transfer film 54 with laser light causes the transfer film 54 to be selectively adhesive to the sample 50, so as to remove cells of interest 56 from the sample 50. In this connection, it is respectfully pointed out that it is critical to the function of Bonner et al that the transfer film 54 must be contacted to the sample 50 to obtain the cells of interest.

By contrast, according to the structure of the present invention as recited in amended independent claims 1, 12 and 23, a guide optical system or optical guiding means is positioned between the sample and the active optical element or pattern forming means, and laser light is irradiated through the active optical element or pattern forming means, and is then guided by a guide optical system or optical guiding means to the sample so that a portion of the sample corresponding to the necessary area is irradiated with the laser light. That is, in the structure of

the claimed present invention, the active optical element or pattern forming means does not contact the sample (unlike the transfer film 54 of Bonner et al which must contact the sample) to obtain the area of interest.

It is respectfully submitted that Bonner et al clearly does not at all disclose, teach or even remotely suggest a guide optical system or optical guiding means which is positioned between a sample and an active optical element or pattern forming means, and which guides laser light from the active optical element or pattern forming means to the sample so that a portion of the sample corresponding to a necessary area is irradiated with the laser light, as according to the structure of the claimed present invention as recited in each of amended independent claims 1, 12 and 23.

In addition, it is again respectfully submitted that Bonner et al also does not disclose, teach or suggest any of the structural features recited in dependent claims 2, 4, 5, 13, 15, 16, 24-26 and 34-36, for example, all of which were rejected as being anticipated by Bonner et al without any identification of disclosure in Bonner et al that might correspond to the subject matter of these claims.

Caprioli, moreover, has again merely been cited for the disclosure of a laser beam to release samples for analysis.

In view of the foregoing, it is respectfully submitted that the present invention as recited in each of amended independent claims 1, 12 and 23, as well as each of claims 2-11, 13-22 and 24-36 respectively depending therefrom, clearly patentably distinguishes over Bonner et al and Caprioli, taken singly or in combination, under 35 USC 102 as well as under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,

/Douglas Holtz/

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